



Oriental Trexim Pvt. Ltd.

Building Future

Material Safety Data Sheet

1 Identification of the Substance and Company

Product name: **Microsilica / Silica Fume**

Product application: Cementitious systems

Address/Phone No.: Oriental Trexim Pvt. Ltd.
521, Grohitam Bldg, Plot No 14B,
Sector 19, Vashi,
Navi Mumbai - 400705, Maharashtra
INDIA.
PH : +91 22 27802935
FAX : + 91 22 27895783
Email : orientaltrexim@gmail.com

2 Composition/Information on Ingredients

Otherwise Known as	Silica fumes, Microsilica, Silica powder, Amorphous silica, Silicon dioxide powder, condensed SiO ₂ -fume, Silica fume.
IUPAC-name	Silicon dioxide
CAS No.	69012-64-2
EINECS No.	273-761-1

Microsilica may contain small amounts of crystalline quartz (<0.5%).

3 Hazards Identification

Microsilica is unlikely to cause harmful effects when handled and stored as advised. See section 7.

4 First Aid Measures

Inhalation	Remove exposed person from dusty area. Fresh air.
Skin contact	Wash contaminated skin with water and/or a mild detergent.
Eye contact	Rinse eyes with water/saline solution. If discomfort persists, obtain medical attention.
Ingestion	Not applicable.

Oriental Trexim Pvt. Ltd

Tel: +91 22 27802935 Fax: +91 22 27895783

E-mail: orientaltrexim@gmail.com [Http://www.orientaltrexim.com](http://www.orientaltrexim.com)

Add: 521, Grohitam Bldg, Plot No : 14B, Sector 19, Vashi, Navi Mumbai - 400705 INDIA



Oriental Trexim Pvt. Ltd.

Building Future

5 Fire Fighting Measures

Microsilica is not combustible and the dust entails no danger of explosion.

Extinguishing media: Not applicable

6 Accidental Release Measures

Avoid exposure to dust of microsilica. Released material should be collected in suitable containers.

7 Handling and Storage

Handling	Avoid dust generation. See section 8.
Storage	Keep away from hydrofluoric acid (HF). Not to be stored at temperatures near to or below 0 C.

8 Exposure Controls/Personal Protection

A) Occupational exposure controls:

Avoid inhalation of dust. Ensure good dust ventilation during use. Wear a CE-marked respirator according to EN 149 FFP 2S/3S during dust generating operations. Use protective gloves and eye protection. Facilities for Eye flushing should be available.

Occupational Exposure Limits (HSE, EH40/2002-2003):

	CAS Number	8hr TWA		10 minute STEL	
		ppm	mg/m ³	ppm	mg/m ³
Silica, amorphous (SiO ₂)	-				
Total inhalable dust		-	6	-	-
Respirable dust		-	4	-	-
Silica, crystalline (SiO ₂)	-				
Respirable dust		-	0.3	-	-

The indicated value is a Maximum Exposure Limit, MEL.

B) Environmental exposure controls:

See sections 6, 7 and 12.

Limit values ambient air (Directive 1999/30/EC):

	Averaging time	Limit value	By date
PM ₁₀ ⑤	24 Hrs	50 µg/m ³	1 January 2005
PM ₁₀	Calendar year	40 µg/m ³	1 January 2005

⑤ not to be exceeded more than 35 times a calendar year

Oriental Trexim Pvt. Ltd

Tel: +91 22 27802935 Fax: +91 22 27895783

E-mail: orientaltrexim@gmail.com Http://www.orientaltrexim.com

Address: 521, Grohitam Bldg, Plot No : 14B, Sector 19, Vashi, Navi Mumbai - 400705 INDIA



9 Physical and Chemical Properties

Form:	Ultrafine amorphous powder (respirable dust), dust forms agglomerates
Colour:	Grey
Odour:	Odourless
Melting Point (°C):	1550-1570
Solubility (Water):	Insoluble/Slightly soluble
Solubility (Organic solvents):	Insoluble/Slightly soluble
Specific Gravity (water =1):	2.2-2.3
Bulk density (kg/m ³) approx. :	150-700
Specific surface (m ² /g):	15-30
Particle size, mean (µm):	0.15 (µ80 weight% of primary particles have a diameter < 5 µm).

10 Stability and reactivity

Conditions to avoid:	See below
Materials to avoid:	Hydrofluoric acid (HF).
Hazardous Decomposition Product(s):	Microsilica reacts with hydrofluoric acid (HF) forming toxic gas (SiF ₄). Heating microsilica above 1000 °C can result in the formation of crystalline SiO ₂ -modifications as cristobalite / tridymite which may cause pulmonary fibrosis (silicosis).

11 Toxicological Information

Acute effects:

INGESTION:	Finely divided dust may cause irritation and dehydration of mucous membranes.
INHALATION:	Finely divided dust may cause irritation and dehydration of mucous membranes.
SKIN CONTACT:	Finely divided dust may cause mechanical irritation and dehydration.
EYE CONTACT:	Finely divided dust may cause mechanical irritation and dehydration.

Chronic effects:

Inhalation of microsilica dust is considered to entail minimal risk of pulmonary fibrosis (silicosis). However, chronic obstructive lung disease is suspected following long term exposure (years) for concentrations above recommended occupational exposure limits.



Oriental Trexim Pvt. Ltd.

Building Future

12 Ecological Information

Microsilica is not characterised as dangerous for the environment.

MOBILITY:	The product is not mobile under normal environmental conditions.
PERSISTENCE:	Not relevant for inorganic substances.
BIOACCUMULATION:	Not relevant.
ECOTOXICITY:	Microsilica: Daphnia magna: 24 h EC ₅₀ > 1002 mg.l ⁻¹ 24 h EC ₁₀₀ > 1002 mg.l ⁻¹ NOEC 319 mg.l ⁻¹ Coarse microsilica has been subject to Microtox ⇔ screening test. No acute toxicological effects could be observed in the test organisms.

13 Disposal Considerations

The material should be recovered for recycling if possible.

This material is not classified as hazardous waste according to Commission Decisions 2000/532/EC and 2001/118/EC. Prior to disposal of large quantities of this material advice should be sought from the relevant Waste Regulation Authority.

14 Transport Information

UN	-
IMDG/IMO	Not subject to classification
ADR/RID	Not subject to classification
ICAO/IATA	Not subject to classification

15 Regulatory Information

Product classification and labelling:

Symbol:	Not subject to classification
R-phrases:	None
S-phrases:	None

The text of this Data Sheet is prepared in compliance with:

- Commission Directive 2001/58/EC.
- Council Directive 67/548/EEC and its subsequent amendments.

16 Other Information

Literature references are available upon application to the manufacturer.

Oriental Trexim Pvt. Ltd

Tel: +91 22 27802935 Fax: +91 22 27895783

E-mail: orientaltrexim@gmail.com [Http://www.orientaltrexim.com](http://www.orientaltrexim.com)

Add: 521, Grohitam Bldg, Plot No : 14B, Sector 19, Vashi, Navi Mumbai - 400705 INDIA